



National Brownfield Association  
Indiana Chapter Technical Committee  
Environmental, Inc. Review Comments  
RISC TPH Chapter Draft  
Dated January 31, 2006

May 1, 2006

Robert Moran  
Indiana Department of Environmental Management  
Office of Land Quality  
100 North Senate Avenue  
Indianapolis, IN 46204

Dear Mr. Moran:

On behalf of the National Brownfield Association Indiana Chapter (NBA) we are providing you with our comments on the Health-Based Closure Level Determination of Total Petroleum Hydrocarbons. We appreciate the opportunity to review these guidelines and provide comments and recommendations. We trust our comments and recommendations will enhance the great amount of effort the Department has put forth on this important technical issue. The NBA looks forward to ongoing dialogue to ensure our comments and recommendations are understood.

By the way of introduction, the NBA is a non-profit, educational organization dedicated to stimulating the responsible redevelopment of brownfields. The NBA is a national organization with 14 affiliated chapters in the US and Canada. The Indiana Chapter of the NBA represents a wide array of brownfield stakeholders - property owners, developers (both profit and non-profit), government representatives, investors, and service professionals - in developing and promoting responsible solutions to the legal, policy and financial hurdles that arise during the redevelopment of brownfields.

While these comments reflect the views of the NBA-IN Chapter, they do not supersede any separately submitted comments by our member organizations or individuals. Additionally, members who are state employees did not participate in their development.

We appreciate the opportunity to lend our input and hope this information is helpful to you.

**Section 3.0 “Closure Levels” on Page 7:** It is unclear if the RISC COCs must be included at the screening level stage, or only when initial TPH levels exceed default closure levels. For example, if soil samples are collected from a former gasoline UST site and analyzed for TPH-GRO, and the analytical results are 125 mg/kg (less than 330 mg/kg), is no further action needed? What if no TPH-GRO is detected in the initial soil samples?



**Section 4.2 “Characterizing TPH in Ground Water” on Page 10:** It is unclear if groundwater sampling and analysis is included at the screening level stage. For example, if TPH-GRO and TPH-ERO are not detected in the initial soil samples, is no further action needed? Similarly, if TPH-GRO and TPH-ERO are detected in the initial soil samples but below 330 mg/kg and 1,000 mg/kg, respectively, is no further action needed?

**Section 5.0 “Determining Closure” on Page 11:** It is unclear what is meant by the statement “If the fractionation analysis shows that the contaminant is a mixture of gasoline and diesel fuel, then use the sum of GRO + ERO.” If the TPH-GRO and TPH-ERO concentrations are added together and the sum is assumed to be the exposure concentration, then the carbon chain fractions that are detected by both the GRO and ERO analyses will be “double counted”, resulting in a falsely elevated exposure concentration.

**Section 6.0 “Sample Collection” on Page 13, and Table 7.1 “Recommended Sample Collection and Analytical Methods” on Page 15:** This section and table instruct the investigator to collect soil samples for gasoline and unknown petroleum products and specific COCs using Indiana Method IN-5035M. To date, this method has only been applied at a limited number of sites with volatile contaminants, but is a significant change from sampling protocols used for LUST, State Cleanup, VRP, and Brownfields sites. Is IDEM now adopting this protocol for all programs and investigations under RISC where TPH-GRO, VPH, and VOC analyses are performed?

Sincerely,